## ADIPS ASM Report Adelaide And The Barossa Valley 28-30 August 2009

The 2009 ADIPS ASM was held across two sites about 80 km apart. It started Friday morning at the Adelaide Convention Centre in conjunction with ADS/ADEA and then Friday afternoon through Sunday at the Novotel Barossa Valley Resort amongst the vines.

The meeting was well attended with 120 delegates, all no doubt attracted by the enticing program.... or the grape......or both.

Leonie Callaway opened the 'Hyperglycaemia, Obesity and Pregnancy' symposium, noting that overweight women were often unaware of their obesity, and often did not understand the issues surrounding excessive weight gain in pregnancy. Leonie described management strategies but advised us that further quality evidence is required to establish the interventions to minimise these risks.

David McIntyre then outlined the relationship of obesity in pregnancy to increasing BGLs at OGTT in the HAPO study. The data show that higher maternal BMI independent of maternal glycaemia is also strongly associated with increased frequency of pregnancy complications, in particular those related to excess fetal growth. The data also show that adiposity is also associated with increased risk of pre-eclampsia.

David Sacks of the Kaiser Foundation Hospital in California was the Novo Nordisk ADIPS Keynote Speaker for the conference. He delivered the Skip Martin Plenary Lecture on the topic of pregestational care for women with diabetes. He outlined not only the clinical management necessary to minimise adverse outcomes but also noted the importance of a supportive attitude in an area where it is easy to discourage a woman with diabetes from pregnancy.

The attendees then weaved their way up by bus to the Barossa Valley, green after good winter rains. The sessions were opened by Jeremy Oats and David McIntyre on the proposed IADPSG recommendations for the diagnosis of hyperglycaemia in pregnancy. Based on both the relationship of the BGL at OGTT to the odds ratio and frequency of complications, the IADPSG is considering a 75 gram OGTT with cutoffs of fasting 5.1, 1 hour 10.0 and 2 hour 8.5mmol/l to diagnose GDM. The diagnosis is made with one or more elevated result. This would diagnose 8.3%, 14.0% and 16.1% respectively of the HAPO cohort with GDM.

There is an option to consider using a fasting and 1 hour OGTT, as the incremental increase in numbers diagnosed by adding the two hour result is small and the test may be more acceptable to women if it took one hour to complete rather than two. The OGTT is being considered for all pregnant women at 24 to 28 weeks gestation, which would make the OGC obsolete. For women who are considered to be high risk for underlying glucose intolerance, IADPSG has made recommendations about earlier testing, noting the need for further data. A fasting BGL  $\geq$  7.0 or random BGL  $\geq$  11.1 (repeated for confirmation) or HbA1c  $\geq$  6.5% would diagnose

Overt Diabetes Mellitus. If the fasting BGL were 5.1-6.9 in early pregnancy then this would diagnose GDM. These proposals will be considered by the IADPSG, which includes representatives from ADIPS, before final recommendations are made.

The delegates were then poured a glass of fine wine by upcoming winemaker Damien Tscharke and his wife Eva (a couple of names to remember for wine lovers) and enjoyed gourmet cheeses before attending the Eli Lilly poster session. The field was particularly strong this year and the best poster award was taken out by Amanda Aylward. It is intended that the format of poster presentations with wine and cheese as inaugurated at the Christchurch ASM in 2007 will continue as a regular feature of future meetings.

A buffet dinner followed with more Tscharke and Glaymond wines to lubricate proceedings.

David Sacks opened the Saturday sessions with a talk on fetal macrosomia which detailed the complexities of the identification of the condition, its association with BGL control, fetal weight gain and adverse outcomes. Postprandial BGLs are better predictors than preprandial but there is still much to be learnt about the associations of this condition.

This was followed by free communications. The Graz Clock award for best presentation went to Arjuna Pathmaperuma regarding research into the factors affecting free fatty acid storage in trophoblast and its relation to BGL. Robyn Barnes took the Young Investigator Award for a research assessing the predictors of LGA and SGA in GDM pregnancy.

James Dunbar and Prasuna Reddy of the Greater Green Triangle University discussed their proposal to for a system change model for the prevention of post-GDM DM. Their proposal includes the setting up of a GDM register, an RCT of lifestyle intervention in the prevention of post-GDM DM which would include economic assessment and the development of government policy. They have applied for funding to proceed with their study.

In the next session Jeremy Oats delivered an oration on the outcomes for pregestational diabetes in Victoria. Surprisingly these data showed worsening for most outcomes since 1992, reminding us of the important work to do in this area. The ADIPS President Glynis Ross announced that in future, select speakers of high lifetime achievement would be invited to talk to the ADIPS ASM under the title of the Jeremy Oats Oration. The meeting left Jeremy in no doubt of the high regard he is held by the society.

Many took the option of a winery tour on the Saturday afternoon and were treated to some warm hospitality by the wineries and there was no sparing of the glasses.

The ADIPS conference dinner was held on the Saturday evening and included a brief presentation of a gift from ADIPS to David Sacks for his welcome contribution to the meeting both as a speaker and from the floor.

The Sunday session was on the topic of glucose meters in pregnancy. Nimalie Perrera showed data comparing the finger prick capillary BGL results for six commonly used glucose meters with venous plasma BGLs. These showed up total analytic error ranging from 12 to 32%, reminding us of the limitations of BGL meters particularly in pregnancy. She also reminded us that if there was an unexpected high result to enquire regarding sugar on the fingers, paracetamol and vitamin C consumption and other potential causes. It was also suggested from the floor that enquiring about emotional experiences including sexual activity could explain these results but this sounded a bit like secret women's business to some of us. Wah Cheung discussed the inaccuracy of using fingerprick BGLs for diagnosis and Chris Nolan showed data concerning the variation in accuracy of different strips used in the same meter. A panel discussion followed which noted that trials such as ACHOIS used BGL meters with similar if not worse limitations and yet still showed a positive outcome.

The final session was presented by Bob Moses on the IADPSG draft guidelines concerning the management of diabetes in pregnancy, noting that these largely matched ADIPS guidelines. He noted that a biennial OGTT to be performed post-GDM could be conveniently done at the same time as a breast examination and cervical smear. This prompted discussion whether such a combined process might however reduce the rates of cervical smear.

The meeting closed, farewells were made and the buses drifted back to Adelaide airport. The overriding impression of this meeting was not only the remarkable depth of talent amongst the established speakers but also the vibrancy of those up and coming. The sponsors support was strong and delegates can look forward to next year's program in Sydney. For the continued success of these meetings, the society is indebted to Jeremy Oats for his vision and leadership over many years. The session honouring him will be especially remembered by all who attended.

**Bill Jeffries**